

What is claimed is:

1. A method of dispatching an IP datagram comprising socks traffic on a socks server, in an Internet Protocol (IP) network comprising a plurality of socks servers, said IP datagram comprising an IP header comprising a Type Of Service (TOS) field, said method comprising the steps of:

in a socks dispatcher:

- retrieving the value of a Type Of Service (TOS) field from the IP header of the IP datagram; and
- selecting a socks server \ referring to a first table \, said first table defining for each value of the TOS field one or a plurality of socks servers.

2. The method according to claim1 wherein said IP datagram is sent by an IP network device with a given priority, and wherein said step of retrieving the value of the Type Of Service (TOS) field is followed by the further step of:

in the socks dispatcher:

- determining the priority of the IP datagram by referring to a second table, said second table defining a priority for each value of the Type Of Service (TOS) field.

3. The method according to claim 2 wherein said IP datagram comprises data according

2 to a given application level protocol, said step of determining the priority of the IP datagram
3 comprising the further step of:

- 4 • determining the application level protocol of data transported in said IP datagram by
5 referring to said second table , said second table defining a priority and an application
6 level protocol for each value of the Type Of Service (TOS) field .

1 4. The method according to claims 1 or 2 wherein in case of congestion in one or a plurality
2 of output queues, said step of determining the priority of the IP datagram is followed by the
3 further steps of:

- 4 • discarding in said one or plurality of output queues IP datagrams having the lowest
5 priority until there is no more congestion, and
- 6 • discarding the IP datagram when said IP datagram compared with IP datagrams in
7 said one or plurality of output queues, has the lowest priority.

1 5. The method according to claims 1 or 2 wherein said first table comprises for each sock
2 server :

- 3 • an identifier , preferably an address,
- 4 • one or a plurality of TOS field values ,
- 5 • optionally, a sock server capacity ,
- 6 • optionally, application level protocols supported by the socks server.

1 6. The method according to claim 2 comprising the initial steps of:

- 2 • configuring said first and second tables,
3 • defining a default socks server for values of the Type Of Service (TOS) field not defined
4 in the first table, and
5 • defining a default priority and optionally a default application level protocol for values
6 of the Type Of Service (TOS) field not defined in the second table.

1 7. The method according to claims 1 or 2 wherein the step of selecting a socks server
2 referring to a first table, said first table defining for each value of the Type Of Service (TOS)
3 field one or a plurality of socks servers, comprises the further steps of:

- 4 • determining the number of socks servers defined for the value of the Type Of Service
5 (TOS) field retrieved from the IP datagram:
6 • if only one socks server is defined in the first table, forwarding the IP datagram
7 to said socks server, and
8 • if more that one socks server is defined in the first table, forwarding the IP
9 datagram to a socks server selected according to its capacity and the priority of the
10 IP datagram.
11

1 8. A socks dispatcher comprising:

- 2 an ip network comprising a plurality of socks servers, and
3 an IP datagram comprising an IP header, said IP header comprising aType of Service
4 (TOS) field wherein said socks dispatcher

retrieves a value of said TOS field from the IP header of the IP datagram, and
selects a socks server referring to a first table, said first table defining for each value
of the TOS field, one or a plurality of socks servers.

9. A dispatcher according to claim 8 further comprising an IP network device wherein said
IP datagram is sent by said IP network device with a given priority, and wherein said
retrieving step is followed by a step of:

determining the priority of the IP datagram by referring to a second table, said second
table defining a priority for each value of the Type of Service (TOS) field.

10. A computer program product having computer readable program code for dispatching
an IP datagram comprising socks traffic on a socks server, in an Internet Protocol (IP)
network comprising a plurality of socks servers, said IP datagram comprising an IP header
comprising a Type Of Service (TOS) field, said computer readable program code
comprising the steps of:

in a socks dispatcher:

- computer readable program code means for retrieving the value of a Type Of Service (TOS) field from the IP header of the IP datagram; and
- computer readable program code means for selecting a socks server referring to a first table, said first table defining for each value of the TOS field one or a plurality of socks servers.

1 11. The computer program product according to claim10 wherein said IP datagram is sent
2 by an IP network device with a given priority, and wherein said step of retrieving the value
3 of the Type Of Service (TOS) field is followed by the further step of:

4 in the socks dispatcher:

5 • computer readable program code means for determining the priority of the IP datagram
6 by referring to a second table, said second table defining a priority for each value of the
7 Type Of Service (TOS) field.